

## Section 7 Contents

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# 7

## SECTION

# Regulation/Institutional Considerations

## UTAH STATE WATER PLAN - WEBER RIVER BASIN PLAN

Water is a highly sought after and valued commodity; and like all commodities of high value, complex laws and regulations are required to manage its ownership, use and consumption.

### 7.1 Introduction

This section of the *Weber River Basin Plan* presents information and data associated with state and federal water-related laws and regulations. Discussions in this section include the background and responsibilities given to state and federal agencies to administer these laws and regulations.

### 7.2 Setting

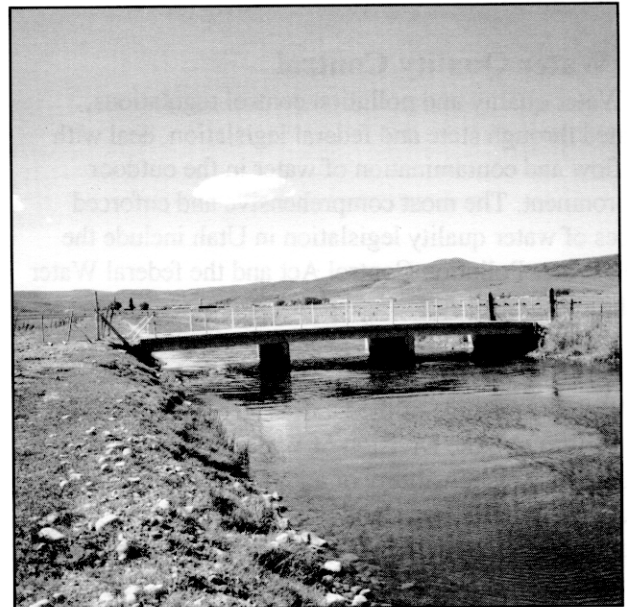
At the local level, water resources are generally managed by ditch and canal companies, water conservancy and conservation districts and municipal public works departments. These local agencies are involved with the day to day operation of the many storage, treatment and distribution systems that make it possible to deliver water from high mountain watersheds to the various agricultural, domestic, industrial and commercial users. Although local water agencies are responsible for the ultimate implementation or adherence to all state and federal water laws and regulations, they are generally not responsible for their creation or passage. Water laws and regulations are created by state and federal governing bodies that delegate enforcement or administration to a number of public water and environmental agencies.

### 7.3 Water Rights Regulation

The administration of water rights laws is the responsibility of state governments. In Utah, the Division of Water Rights is given this responsibility. The division is responsible for 1) processing water rights applications, 2) distribution of water, 3) adjudication of surface and groundwater rights, 4) dam

safety programs, 5) regulation of alterations to streams and rivers, 6) licensing well drilling contractors and administering well drilling regulations, 7) studies to assess the extent of existing surface and groundwater supplies, and 8) the maintenance of all filed water rights records.

The process of verifying that actual surface and groundwater diversions are made in accordance with



*Weber-Provo Canal near Kamas*

adjudicated water rights requires a considerable amount of field work. The State Engineer supervises all efforts to make field measurements of surface and groundwater diversions. In general, gaging stations

have been constructed at critical points on existing river systems. Flow measurements are taken on a schedule at these critical gaging points and at points of diversion from the river system by a river commissioner or deputy river commissioner. Groundwater diversions are determined by evaluating pumping data at selected wells.

The Weber River Basin has one river commissioner with seven deputy river commissioners assigned to various portions of the Ogden and Weber rivers. Assigned areas generally include the upper and lower Weber River, Synderville Basin, Coalville/Chalk Creek watersheds, Morgan County, and upper and lower Ogden River.

At the end of each water year, the river commissioner prepares an annual report for the Weber and Ogden rivers. Both reports are submitted to the State Engineer as a permanent record of annual water deliveries to individual water right holders or to agencies with multiple water rights or water service agreements.

Although the Weber River Basin is considered to have ample water supplies for projected domestic and commercial uses, it is very close to being fully appropriated. Surface waters are fully appropriated. However, prospective water users can still make application to appropriate groundwater primarily within the East Shore Area.

## **7.4 Water Quality Control**

Water quality and pollution control regulations, created through state and federal legislation, deal with the flow and contamination of water in the outdoor environment. The most comprehensive and enforced pieces of water quality legislation in Utah include the Utah Water Pollution Control Act and the federal Water Pollution Control Act.

### **7.4.1 Utah Water Pollution Control Act**

With the passage of the Utah Water Pollution Control Act (UWPCA), the Division of Water Quality was assigned the responsibility of administering state and federal water pollution standards and regulations. These responsibilities include 1) review of construction plans for surface wastewater disposal systems, 2) administration of various water quality monitoring programs, 3) development and implementation of water quality management plans, 4) administration of state revolving wastewater construction loan programs, and 5) the enforcement of various effluent discharge permit requirements.

### **7.4.2 Federal Water Pollution Control Act**

The Environmental Protection Agency (EPA) is the regulatory agency charged with the responsibility of enforcing the Water Pollution Control Act (WPCA) and two of its major amendments, the Clean Water Act (CWA) passed by Congress in 1977 and the Water Quality Act (WQA) passed in 1987. The enforcement effort, however, is in close cooperation with the Utah Department of Environmental Quality which has primacy and administers the issuance of discharge permits for point and non-point source pollution.

The WPCA generally includes regulations and programs designed to maintain a minimum standard of water quality in the outdoor environment. Minimum acceptable levels of water quality are monitored and regulated by a number of regulations or requirements including 1) establishment of maximum contamination levels (MCL) for raw drinking water sources, 2) issuing National Pollutant Discharge Elimination System (NPDES) permits to all entities responsible for point discharges to existing surface waters, and 3) controlling the dredging and related alterations to existing surface water courses including wetlands.

The need for water quality regulations for point source pollution is obvious with the existence of 14 wastewater treatment plants currently discharging treated effluent to the Weber River and Ogden River systems. Perhaps less obvious, but in some areas of the basin of equal importance, is the need to enforce regulations dealing with non-point source pollution. Continued development of the basin has converted hundreds of acres of farm and range land to residential and commercial developments. This transformation has changed the nature and characteristics of surface runoff within these highly developed sub-basins. The potential for significant non-point source pollution exists in these areas, particularly in rapidly growing Davis, Weber, Morgan and Summit counties, and programs need to be implemented to adequately monitor the impact of development on water quality by surface runoff.

## **7.5 Drinking Water Regulations**

Regulations that provide for monitoring and maintaining public drinking water quality are primarily established and enforced by the EPA and Division of Drinking Water. The federal Safe Drinking Water Act specifically sets minimum acceptable standards for drinking water quality and provides funding for the construction of water treatment facilities. In general, the EPA delegates the responsibility of monitoring existing

drinking water quality and the administration of various drinking water funding programs to state agencies. As a result, the Division of Drinking Water is the agency responsible for all drinking water issues, projects and programs.

As prescribed by the Utah Safe Drinking Water Act, the division is responsible to maintain and enforce drinking water standards through 1) development and implementation of a comprehensive water monitoring program, 2) training or certification of treatment plant and distribution system operators, 3) reporting of water quality data to the EPA, and 4) general administration of a rating program to assess the overall effectiveness of existing treatment plants and distribution systems.

Approximately 76 community and 95 non-community culinary water systems are currently operating in the Weber River Basin, all of which are monitored by the Division of Drinking Water for water quality and adherence to state and federal drinking water regulations. These systems are supplied by six existing surface water treatment systems and over 350 public and private wells.

## **7.6 Environmental Considerations**

The amount and quality of water dictates the characteristics of the natural environment and its ability to sustain most forms of life. Water for human consumption is regulated and treated to protect against the spread of water-borne disease. Water to sustain fish and wildlife species must also be regulated to assure the maintenance of quality habitat in streams, lakes, reservoirs and wetlands.

Current federal regulations to protect fish and wildlife species can have direct and significant impacts on the development of future water supplies and the ongoing operation of existing water projects. Impacts on threatened and endangered species must be considered during early planning phases of any water resources related project. The Endangered Species Act (ESA) requires agencies, organizations or private individuals to consult with the U.S. Fish & Wildlife Service (FWS) to assess impacts a potential project may have on threatened and endangered species in a given area. The consultation requirement allows the FWS to become involved in early phases of a project to assist a developer or contractor to determine design or construction options that could minimize impacts on threatened and endangered species.

For projects that require the approval of a federal Clean Water Act 404 permit, developers or contractors are required to submit pertinent design and operation

data to the U.S. Army Corps of Engineers. This information is reviewed and evaluated by a number of federal and state agencies for overall feasibility and potential impacts on fish and wildlife habitat. The FWS is the reviewing agency for fish and wildlife habitat issues.

## **7.7 Dam Safety**

Over 70 regulated dams in the Weber River Basin system have been constructed for a variety of uses and/or reasons. These dams range in size from 198,200 acre-feet of active storage within Willard Reservoir to only a few acre-feet of storage at a number of smaller municipal reservoirs. Current uses of these dams include recreation; storage of culinary, secondary and irrigation water; wildlife and fish habitat; and flood control.

As the backbone of a water reclamation project, dams and reservoirs represent a vital and significant investment in the overall development of a basin's water resources. They also represent a potential loss of life and property in the event of catastrophic natural disasters. The State Engineer classifies dams throughout the state with high, medium, or low hazard ratings. Of the 74 dams currently subjected to regular inspections, 38 have been classified as high hazard. These dams and their hazard ratings are summarized in Table 7-1.

To minimize the threat of catastrophic dam failures, safety programs are actively administered by various state and federal agencies. The Division of Water Rights conducts safety inspections of all non-federal dams while the Bureau of Reclamation is responsible for the inspection and safety of all dams constructed under federal water reclamation projects. The Division of Water Resources participates in the inspection of non-federal dams constructed with funds provided by the Board of Water Resources. ♦

**Table 7-1  
SUMMARY OF BASIN DAMS AND RESERVOIRS**

Name	Height (ft)	Crest Length (ft)	Primary Use	Hazard Rating	County	Owner/Operator
Joyce	27	440	Irrigation	Low	Summit	Chalk Creek-Hoytsville Irrigation
Kelly Canyon	40	350	Recreation	Mod	Weber	Green Hill Homeowners Assoc.
Lovenia Lake	16	152	Irrigation	Mod	Summit	Fish Lake Reservoir Company
N. Ogden City Coldwater Canyon	38	1,200	Flood Control	High	Weber	North Ogden City
N. Ogden City Coldwater Desilting	20	325	Flood Control	High	Weber	North Ogden City
N. Ogden Orton Park/2100 North	8	2,340	Flood Control	High	Weber	North Ogden City
Northwest	36	800	Irrigation	High	Morgan	Northwest Irrigation Company
Ogden City-27th St. Debris Basin	12	230	Flood Control	Low	Weber	Ogden City Engineering
Ogden City-Sullivan Hollow	18	405	Flood Control	High	Weber	Ogden City Corporation
Ogden City-Waterfall Debris Basin	14	160	Flood Control	Low	Weber	Ogden City Engineering
Ogden City-Strongs Crk Debris Basin	19	220	Flood Control	Low	Weber	Ogden City Engineering
Pleasant View Reservoir	18	740	Irrigation	Mod	Weber	Weber-Box Elder Cons. District
Sand Lake	10	256	Irrigation	Mod	Summit	Fish Lake Reservation Co.
Sargent No. 1	36	600	Irrigation	Low	Summit	Elkhorn Ditch Co.
Seymore Lake	15	260	Irrigation	Mod	Summit	Fish Lake Reservoir Co.
Silver Creek Estates (Upper)	19	175	Irrigation	Mod	Summit	Silver Creek Ranch Corp.
Silver Springs No. 1	13	NA	Recreation	Mod	Summit	Silver Springs Water Co.
Silver Springs No. 2	10	NA	Recreation	Mod	Summit	Silver Springs Water Co.
Smith & Morehouse	82	220	Irrigation	High	Summit	Weber Basin Water Cons. District
Sourdough Wilderness Ranch	33	600	Recreation	Mod	Weber	Sourdough Wilderness Ranch
Causey Reservoir	200	900	Multipurpose	High	Weber	Weber Basin Water Cons. District
East Canyon Reservoir [a]	245	436	Multipurpose	High	Morgan	Davis & Weber Counties Canal Co.
Echo Reservoir	158	1,890	Irrigation	High	Summit	Davis & Weber Counties Canal Co.
Lost Creek Reservoir	220	1,100	Multipurpose	High	Morgan	Weber Basin Water Cons. District
Pineview Reservoir	132	600	Multipurpose	High	Weber	Pine View Water Systems
Wanship Reservoir	156	2,000	Multipurpose	High	Summit	Weber Basin Water Cons. District
Willard Bay	36	90,500	Multipurpose	High	Box Elder	Weber Basin Water Cons. District
Wanship Reservoir			Multipurpose	High	Summit	Weber Basin Water Cons. District
Bear Hollow Access Road Pond	25	250	Irrigation	Mod	Summit	Summit Ranch Joint Venture
Alexander Canyon-Hall	20	175	Recreation	Low	Summit	Dorothy Hall
Alexander Canyon-Halliday	30	500	Recreation	Low	Summit	Herbert Halliday
Anchor Lake	12	157	Irrigation	Mod	Summit	Marchant Ext. Irrigation Co.
Bear Hollow Access Rd. Pond (Lower)	25	250	Irrigation	Mod	Summit	Summit Ranch Joint Venture
Bear Hollow Access Rd. Pond (upper)	28	175	Irrigation	Mod	Summit	Summit Ranch Joint Venture
Boyer Lake	45	850	Irrigation	Mod	Summit	Chalk Creek-Hoytsville Irrigation
Castle Lake	21	203	Irrigation	Mod	Summit	Beaver-Shingle Creek Irrigation
Cliff Lake	30	462	Irrigation	Mod	Summit	Fish Lake Reservoir Co.
Fish Lake	21	239	Irrigation	Mod	Summit	Fish Lake Reservoir Co.
Fourmile Creek	6	4,000	Irrigation	Low	Weber	Warren Irrigation Co.
Fourmile Debris Basin-Harrisville Dam	NA	NA	Flood Control	Mod	Weber	Harrisville City
Heiner's Creek	28	550	Irrigation	Mod	Summit	Skull Valley Co.
Hi-Ute Three Mile Canyon	30	250	Irrigation	Low	Summit	Hi-Ute Investment Co.
Jeremy Ranch	44	500	Irrigation	Mod	Summit	Jeremy Service Corp.
Joan E. Ranch-Perdue Creek	NA	NA	Irrigation	Mod	Summit	Barry Miller
South Ogden City Burch Creek	24	713	Flood Control	High	Weber	South Ogden City
South Ogden City Burch Creek Debris	56	330	Flood Control	High	Weber	South Ogden City
Unitah Mountain Stream	NA	NA	Irrigation	Mod	Weber	Unitah Mtn. Stream Irrigation Co.
Utah Relarding	71	369	Flood Control	Mod	Weber	Weber County
Utah Power & Light [a]	17	73	Power Gen.	Low	Morgan	Utah Power & Light Co.
Wardell/Reservoir	15	960	Irrigation	Mod	Morgan	Wardell Family Ranch
Wilkinson (Harry)	53	524	Irrigation	High	Morgan	Harry Wilkinson
Haight Creek Reservoir (Lower)	27	420	Irrigation	High	Davis	Haight Creek Irrigation Co.
Rudd Creek Debris Basin	15	800	Flood Control	High	Davis	Farmington City
Sunset Pond	21	1,300	Irrigation	High	Davis	Weber & Davis Counties Canal Co.
Holmes Reservoir	70	400	Irrigation	High	Davis	Kyle Anderson
Parrish Creek Debris Basin	22	900	Flood Control	High	Davis	Davis County Flood Control
Deuel Creek Reservoir	20	1,200	Irrigation	High	Davis	Centerville Deuel Creek Irrigation Co.
Kaysville Reservoir	34	NA	Irrigation	High	Davis	Davis & Weber Counties Cannal Co.
Davis County Reservoir	140	500	Flood Control	High	Davis	Davis County Flood Control
Haight Creek Reservoir (Middle)	20	NA	Irrigation	Mod	Davis	Haight Creek Irrigation Co.
Barnard Creek Reservoir	9	100	Flood Control	Low	Davis	Davis County Flood Control
Layton Pond	16	1,800	Irrigation	High	Davis	Weber & Davis Counties Canal Co.
Hooper Draw Debris Basin	42	1,100	Flood Control	High	Davis	Davis County Flood Control
Haight Creek Reservoir (Upper)	100	1,400	Irrigation	High	Davis	Haight Creek Irrigation Co.
Dry Hollow Debris Basin	16	200	Flood Control	High	Davis	Fruit Heights City
Holmes Creek Debris Basin	22	900	Flood Control	High	Davis	Davis County Flood Control
Adams Reservoir	53	1,600	Irrigation	High	Davis	Kays Creek Irrigation Co.
Farmington Pond	32	400	Recreation	High	Davis	Davis County Flood Control
Shepard Creek Debris Basin	25	NA	Flood Control	High	Davis	Davis County Flood Control
Hobbs Reservoir	90	400	Irrigation	High	Davis	Kays Creek Irrigation Co.
Kaysville Reservoir	43	700	Irrigation	High	Davis	Kaysville Irrigation Co.
Davis County Reservoir	13	400	Flood Control	High	Davis	Davis County Flood Control
Deuel Creek Debris Basin	13	200	Flood Control	High	Davis	Davis County Flood Control
Stone Creek Reservoir	105	500	Flood Control	High	Davis	Davis County Flood Control

Table Notes.

[a] denotes concrete dam construction